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(54) Title: RNA VIRUS-DERIVED PLANT EXPRESSION SYSTEM

(57) Abstract: A process of expressing a sequence of interest in a plant, plant part, or plant cell culture, comprising: (a) providing a plant, plant part, or plant cell culture containing in cell nuclei a heterologous DNA having a sequence encoding an RNA replicon operably linked or linkable to a transcription promoter, wherein said sequence encoding an RNA replicon contains (i) sequences for replicon function of said RNA replicon, said sequences being derived from a sequence of a plant RNA virus, (ii) a sequence of interest, whereby said sequences for replicon function exhibit at selected localities of said sequences of said plant RNA virus function-conservative differences from said sequence of said plant RNA virus, said differences causing an increased frequency of replicon formation compared to an RNA replicon not exhibiting said differences; and (b) causing expression of said sequence of interest.